QUADRAPADDLE INSERT USER'S MANUAL

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QUADRAPADDLE RECEIVER INSERT PART IDENTIFICATION

PART # 510 180 101

This section will point out features designed to help determine the proper orientation of the QuadraPaddle receiver Insert (**Figure A**), as well as distinguishing features.

The top of the QuadraPaddle receiver Insert can be determined by the position 1 indicator, designated by the triangle shown in **Figure A**.

The front and rear of the QuadraPaddle receiver Insert are shown in **Figure B**. The front side mates with the QuadraPaddle ITA Insert.

The rear of the QuadraPaddle receiver Insert has the position1 indicator located on the top. Wires exit the QuadraPaddle receiver Insert from the rear side.

The Insert is keyed like the VTAC HSD Insert to ensure proper orientation (**see VTAC User's Manual Section 2-1 Figure C**).

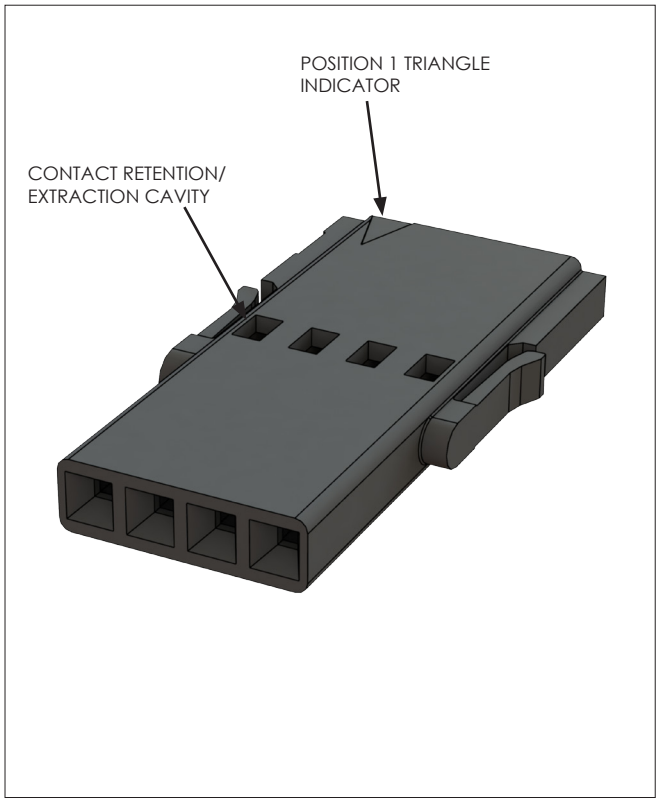

Figure A. QuadraPaddle receiver Insert.

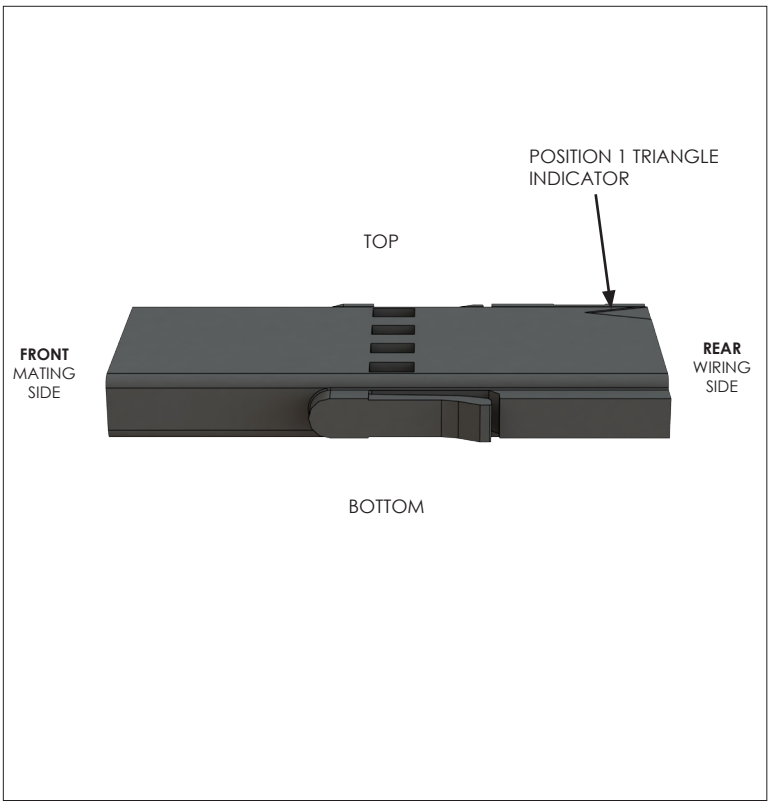

Figure B. QuadraPaddle receiver Insert (side view)

QUADRAPADDLE ITA INSERT PART IDENTIFICATION

PART # 510 181 101

This section will point out features designed to help determine the proper orientation of the QuadraPaddle ITA Insert (**Figure A**), as well as distinguishing features.

The top of the QuadraPaddle ITA Insert can be determined by the position 1 indicator, designated by the triangle shown in **Figure A**.

The front and rear of the QuadraPaddle ITA Insert are shown in **Figure B**. The front side mates with the QuadraPaddle receiver Insert.

The rear of the QuadraPaddle ITA Insert has the position1 indicator located on the top. Wires exit the QuadraPaddle ITA Insert from the rear side.

The insert is keyed like the VTAC HSD Insert to ensure proper orientation (**see VTAC User's Manual Section 2-1 Figure C**).

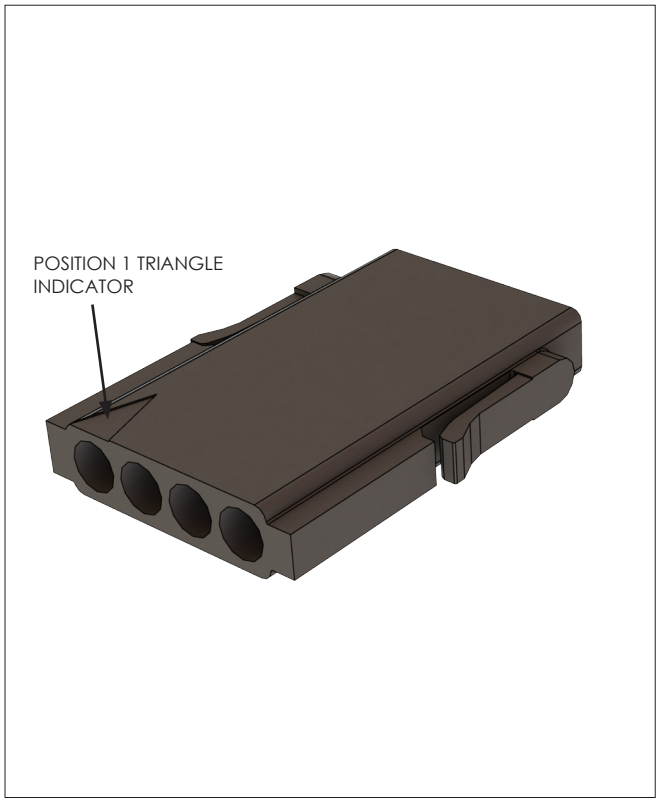

Figure A. QuadraPaddle ITA Insert.

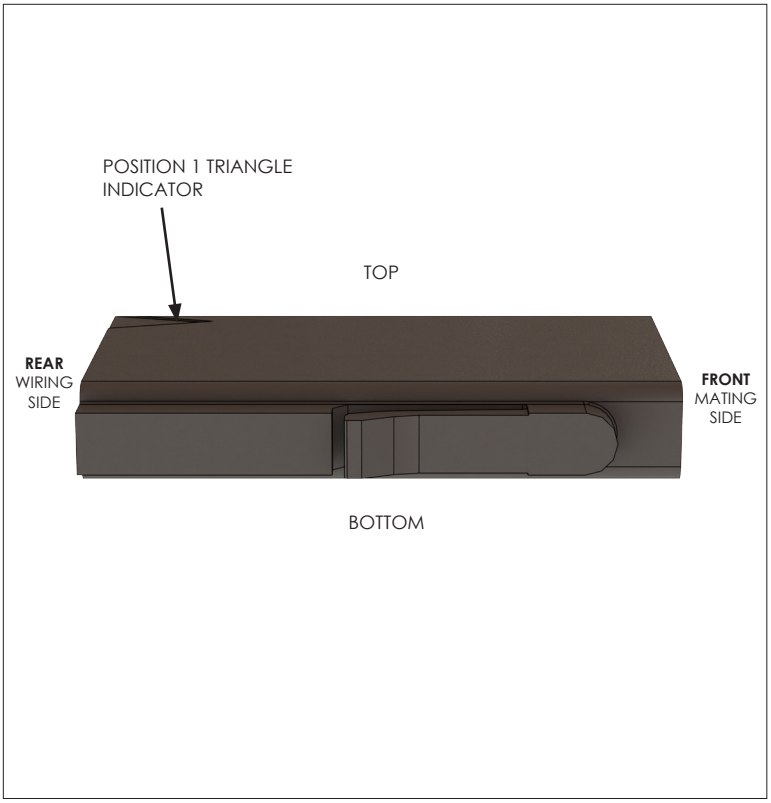

Figure B. QuadraPaddle ITA Insert (side view)

INSERT INSTALLATION/REMOVAL INSTRUCTIONS FOR RECEIVER MODULE

PART # 510 170 101

TOOLS REQUIRED

VTAC Extraction Tool Kit, Receiver and ITA, Part # 910 112 130

INSERT INSTALLATION INSTRUCTIONS

1. Ensure that the Insert(s) is in-line with the corresponding module location. Apply gentle pressure and insert the Insert(s) into the rear (wiring side) of the module shown in **Figure A**. The Insert(s) can only go into one side. Once in place, gently pull the wire to ensure the Insert(s) is fully seated.

INSERT REMOVAL INSTRUCTIONS

1. Group the required number of extraction tools together for the given patchcord shown in **Figure B**. The tool pins should be on the mating side of the module.

WARNING: *All Inserts within each patchcord must be extracted simultaneously to prevent damage to Inserts.*

NOTE: The extraction tools are magnetic to aid in stacking them together.

2. While grasping the extraction tool(s) body from the sides (**Figure B**), slide tool pins into module's extraction cavity square holes until the tool frame is seated against the body shown in **Figure C**.

WARNING: *The extraction tool(s) need to be seated against the module front face before the plunger is pushed in. Otherwise damage to Insert(s) may occur.*

3. Push plunger of extraction tool(s) in to extract Insert(s). The Insert(s) will be ejected out the wiring side of the module shown in **Figure D**.

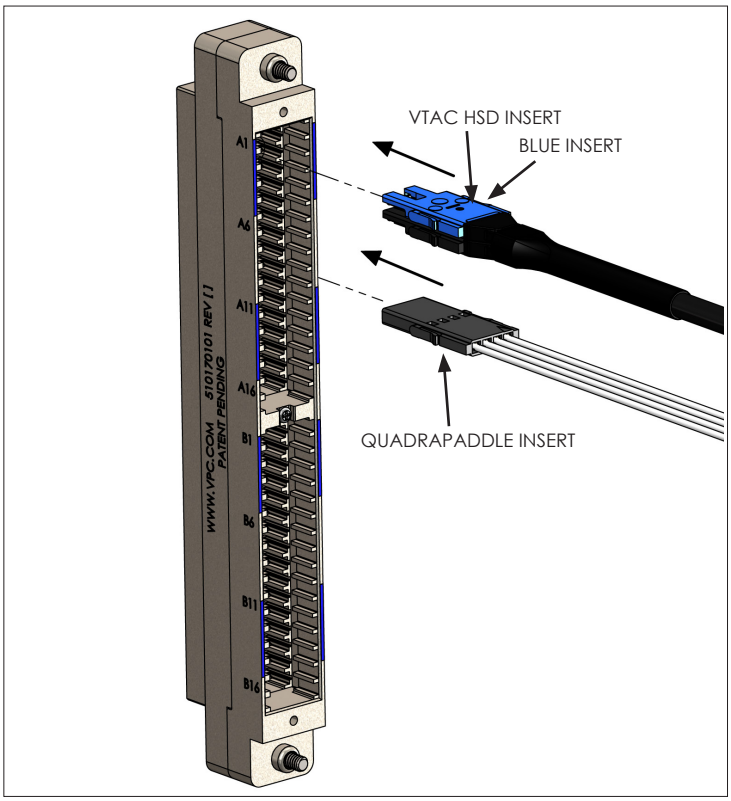

Figure A. Insert installation.

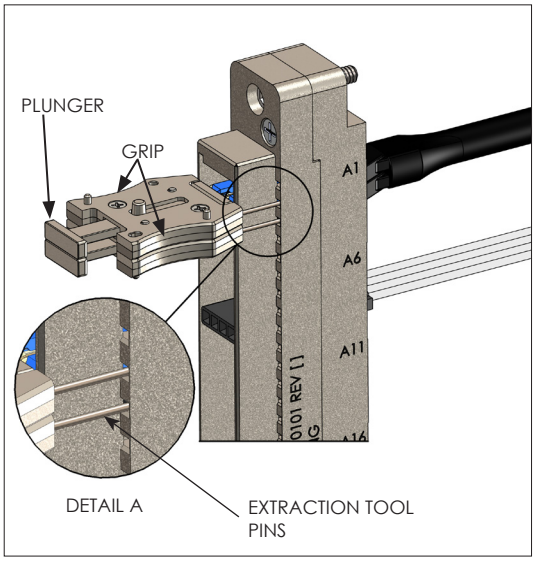

Figure B. Insert removal tool pins.

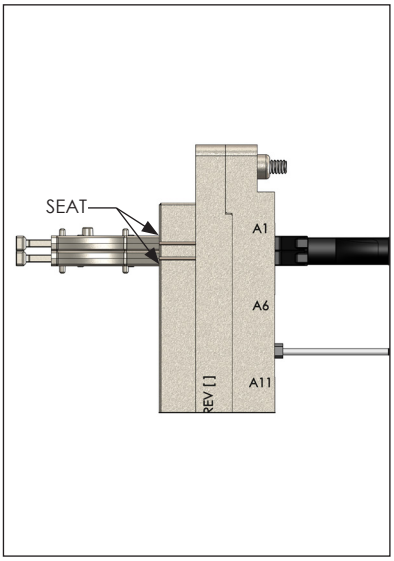

Figure C. Seat removal tool to module frame.

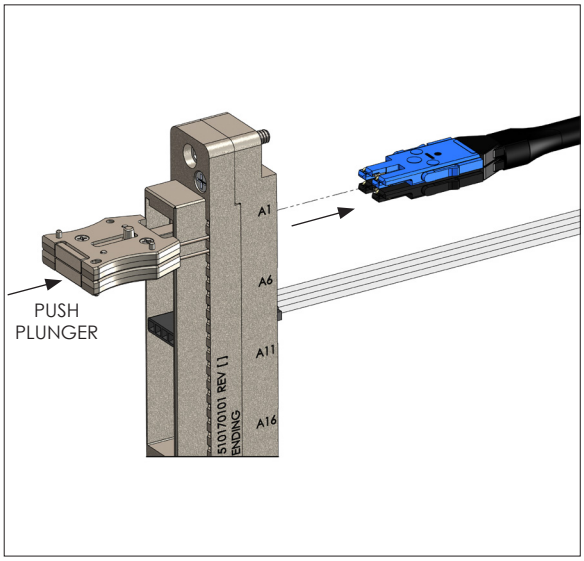

Figure D. Push removal tool plunger.

INSERT INSTALLATION/REMOVAL INSTRUCTIONS FOR ITA MODULE

PART # 510 171 101

TOOLS REQUIRED

VTAC Extraction Tool Kit, Receiver and ITA, Part # 910 112 130

INSERT INSTALLATION INSTRUCTIONS

1. Ensure that the Insert(s) is squared up with the corresponding module location. Apply gentle pressure and insert the Insert(s) into the rear (wiring side) of the module shown in **Figure A**. The Insert(s) can only go into one side. Once in place, gently pull the wire to ensure the Insert(s) is fully seated.

HSD INSERT REMOVAL INSTRUCTIONS

1. Group the required number of extraction tools together for the given patchcord shown in **Figure B**. The tool pins should be on opposite sides of the patchcords or wires to be removed.

WARNING: *All Inserts within each patchcord must be extracted simultaneously to prevent damage to Inserts.*

NOTE: The extraction tools are magnetic to aid in stacking them together.

2. While grasping the extraction tool(s) body from the sides, (**Figure B),** slide tool pins into module's extraction cavity slots until the tool frame is seated against the body shown in **Figure C**.

WARNING: *The extraction tool(s) need to be seated against the module front face before the plunger is pushed in. Otherwise damage to Insert(s) may occur.*

3. Push plunger of extraction tool(s) in to extract Insert(s). The Insert(s) will be ejected out the wiring side of the module shown in **Figure D**.

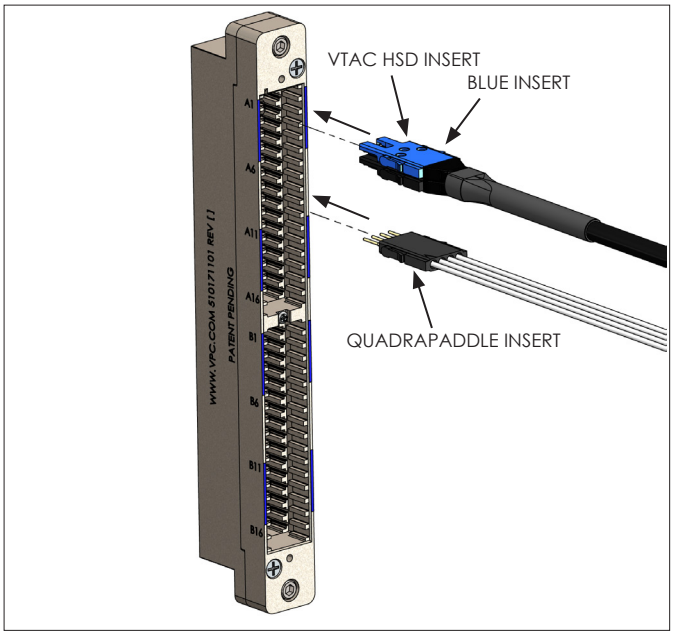

Figure A. Insert installation.

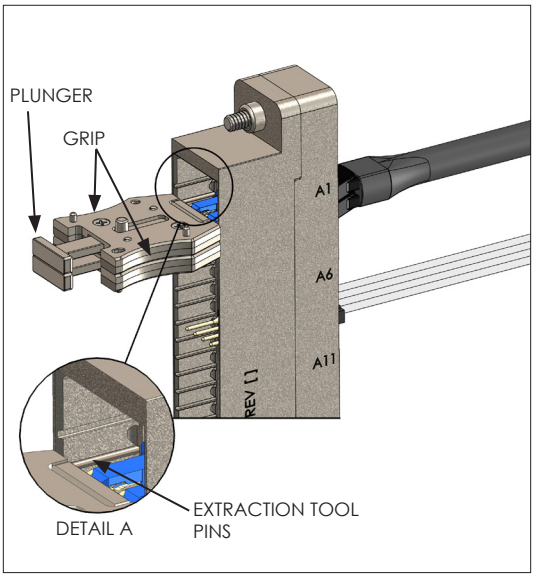

Figure B. Insert removal tool pins.

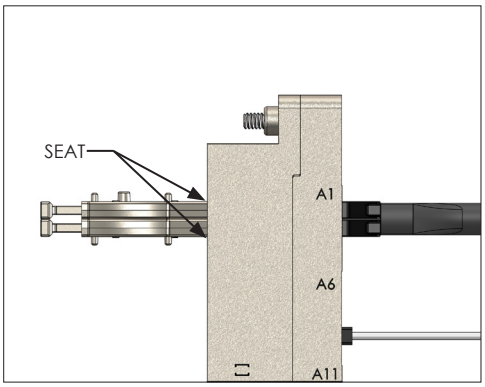

Figure C. Seat removal tool to module frame.

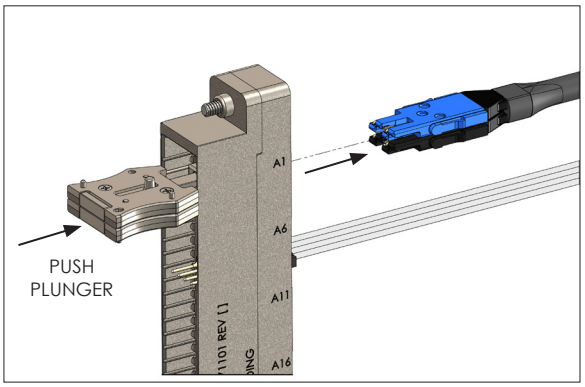

Figure D. Push removal tool plunger.

INSERT INSTALLATION/REMOVAL INSTRUCTIONS FOR i2 MX RECEIVER

PART # 310 130 XXX

TOOLS REQUIRED

VTAC Extraction Tool Kit, Receiver and ITA, Part # 910 112 130

INSERT INSTALLATION INSTRUCTIONS

1. Ensure that the Insert(s) is squared up with the corresponding module location. Apply gentle pressure and insert the Insert(s) into the rear (wiring side) of the module shown in **Figure A**. The Insert(s) can only go into one side. Once in place, gently pull the wire to ensure the Insert(s) is fully seated.

INSERT REMOVAL INSTRUCTIONS

1. Group the required number of extraction tools together for the given patchcord shown in **Figure B**. The tool pins should be on opposite sides of the patchcords or wires to be removed.

WARNING: *All Inserts within each patchcord must be extracted simultaneously to prevent damage to Inserts.*

NOTE: The extraction tools are magnetic to aid in stacking them together.

2. While grasping the extraction tool(s) body from the sides (**Figure B**). slide tool pins into module's extraction cavity slots until the tool frame is seated against the body shown in **Figure C**.

3. Push plunger of extraction tool(s) in to extract Insert(s). The Insert(s) will be ejected out the wiring side of the module shown in **Figure D**.

WARNING: *The extraction tool(s) need to be seated against the module front face before the plunger is pushed in. Otherwise damage to Insert(s) may occur.*

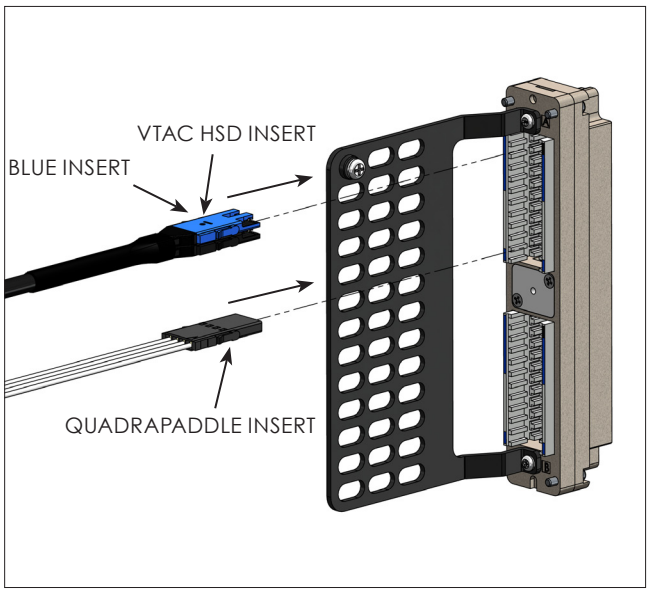

Figure A. Insert installation

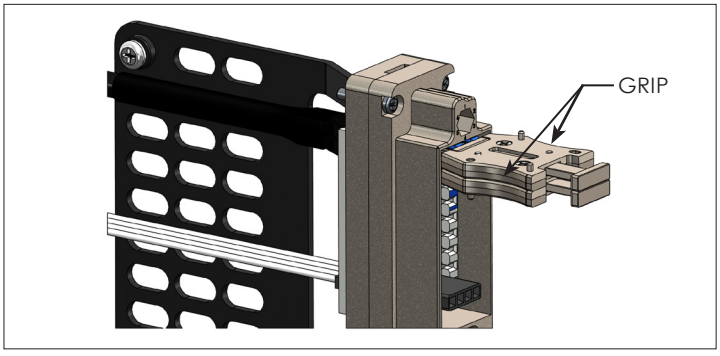

Figure B. Insert Removal.

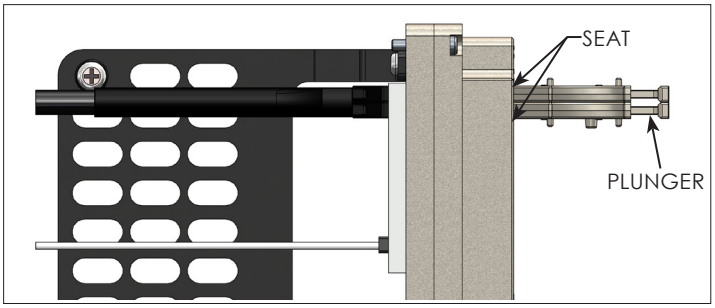

Figure C. Seat Removal tool

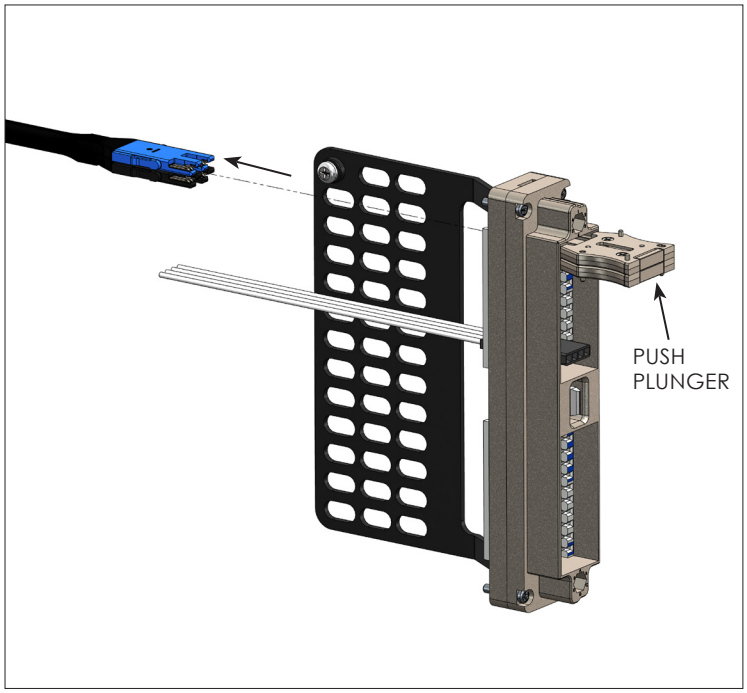

Figure D. Push removal tool plunger.

INSERT INSTALLATION/REMOVAL INSTRUCTIONS FOR i2 MX ITA

PART # 410 130 XXX

TOOLS REQUIRED

VTAC Extraction Tool Kit, Receiver and ITA, Part # 910 112 130

INSERT INSTALLATION INSTRUCTIONS

1. Ensure that the Insert(s) is squared up with the corresponding module location. Apply gentle pressure and insert the Insert(s) into the rear (wiring side) of the module shown in **Figure A**. The Insert(s) can only go into one side. Once in place, gently pull the wire to ensure the Insert(s) is fully seated.

*NOTE: Backshell removal instructions start in **Section 2-5**.*

*NOTE: For i2 MX ITA Cable Assembly and Backshell Installation Instructions, refer to the **i2 MX User's manual Section 5**.*

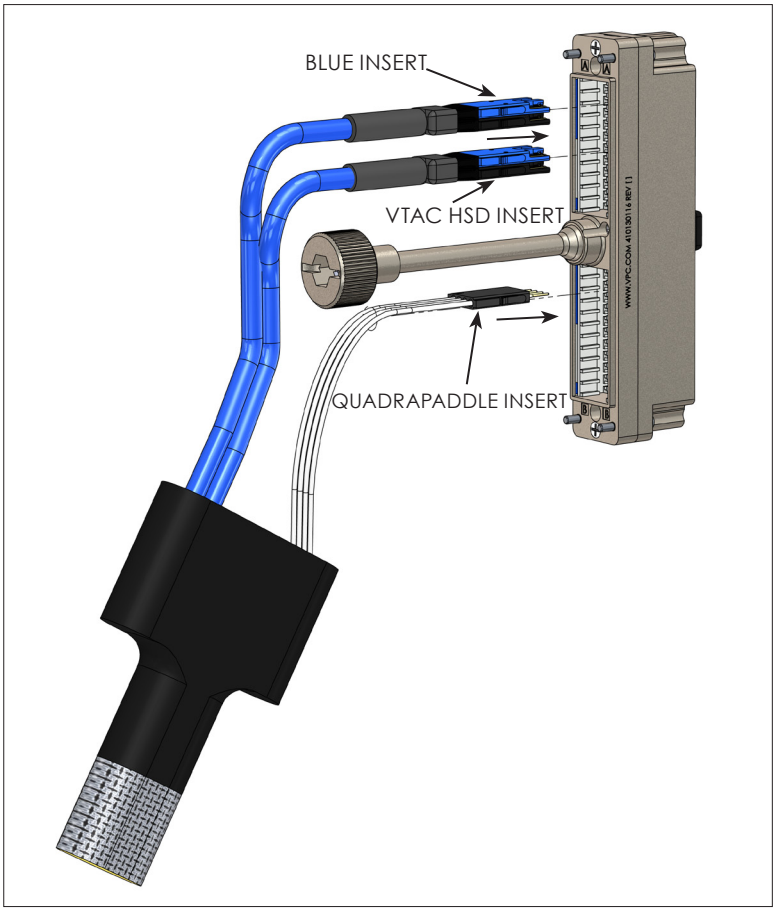

Figure A. Insert installation

INSERT REMOVAL INSTRUCTIONS FOR i2 MX ITA

PART # 410 130 XXX

TOOLS REQUIRED

Phillips Head Screwdriver
Flat Head Screwdriver
1/4" Nut Driver, hollow shaft
VTAC Extraction Tool Kit, Receiver and ITA, Part # 910 112 130

REMOVAL INSTRUCTIONS

1. Disengage the ITA from the receiver.

2. Using a flat head screwdriver, remove the engagement knob screw and engagement knob (**Figure A**).

3. Using a Phillips head screwdriver, loosen the four screws (captive) that secure the backshell to the ITA frame (**Figure B**).

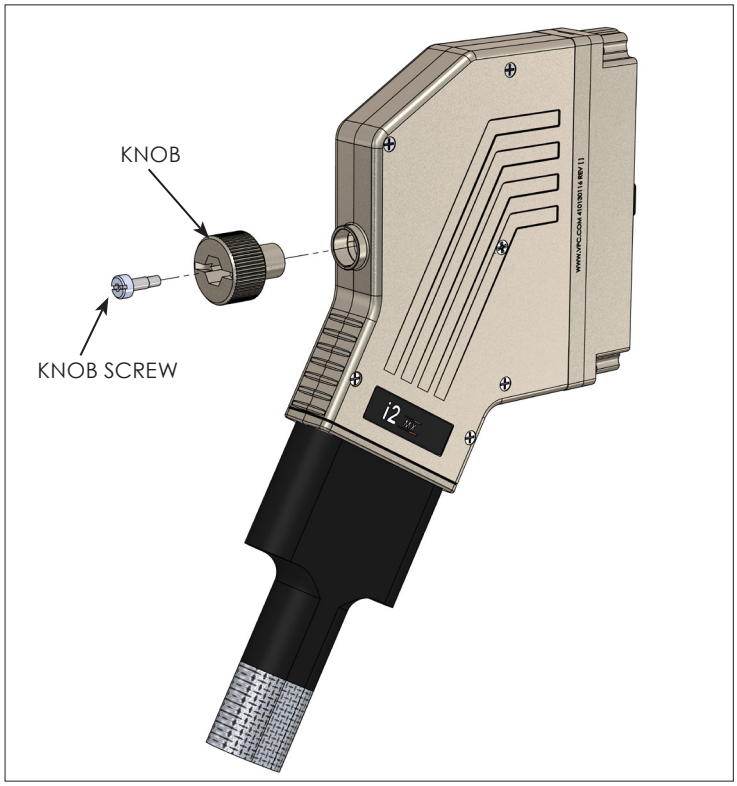

Figure A. ITA knob removal.

Figure B. Remove frame to backshell screws.

INSERT REMOVAL INSTRUCTIONS FOR i2 MX ITA

PART # 410 130 XXX

REMOVAL INSTRUCTIONS (CONTINUED)

4. Using a Phillips head screwdriver, loosen the six screws (captive) that secure the backshell halves. Remove the half with the screws (**Figure C**).

5. Using a nut driver remove nuts on the strain relief clamp, then remove the clamp (**Figure D**).

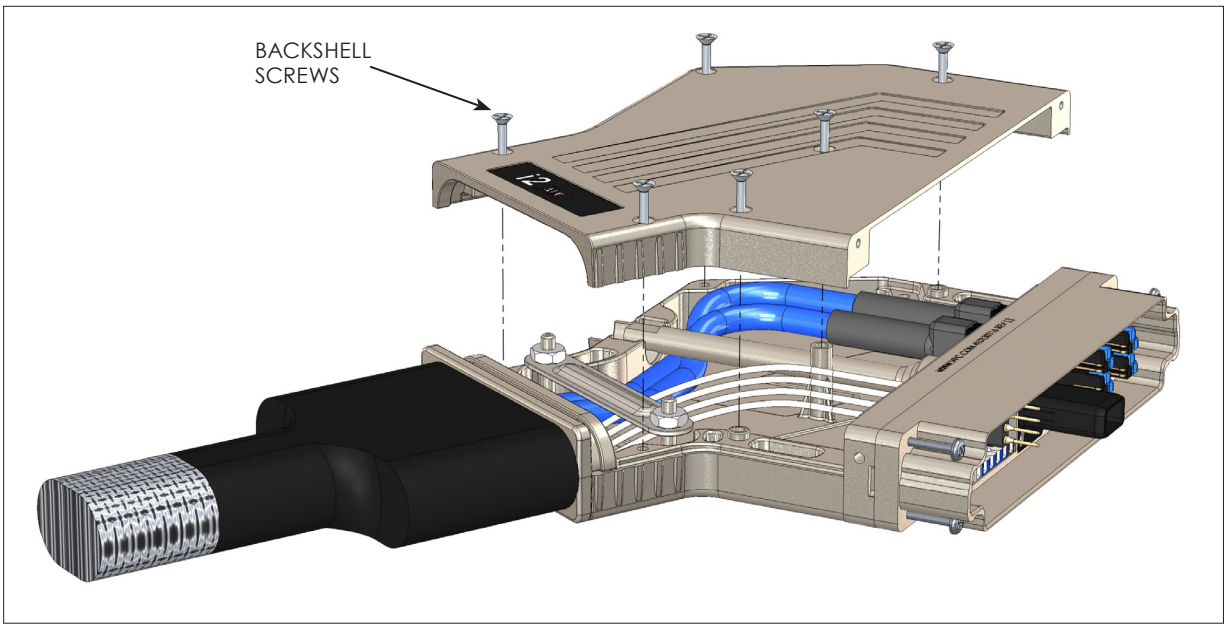

Figure C. Backshell cover removal.

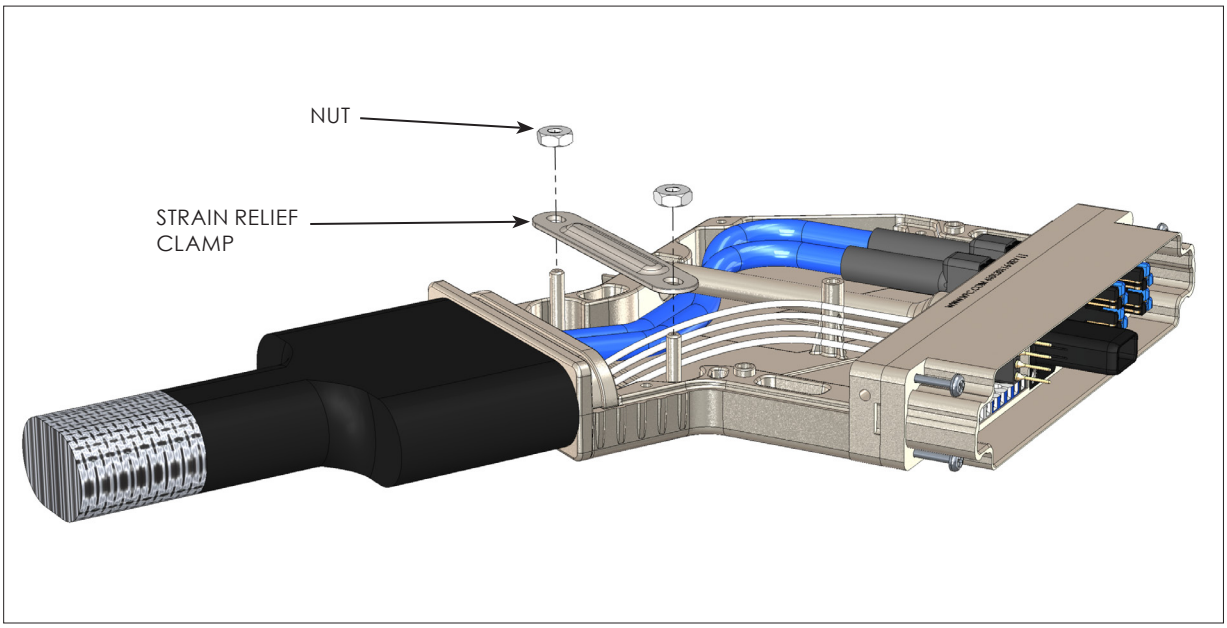

Figure D. Strain relief clamp removal.

INSERT REMOVAL INSTRUCTIONS FOR i2 MX ITA

PART # 410 130 XXX

INSERT REMOVAL INSTRUCTIONS (CONTINUED)

1. Group the required number of extraction tools together for the given patchcord shown in **Figure E**. The tool pins should be on opposite sides of the patchcords or wires to be removed.

WARNING: *All Inserts within each patchcord must be extracted simultaneously to prevent damage to Inserts.*

NOTE: The extraction tools are magnetic to aid in stacking them together.

2. While grasping the extraction tool(s) body from the sides (**Figure E**), slide tool pins into module's extraction cavity slots until the tool plunger is flush with the tool body and the plunger is in contact with the Insert tips shown in **Figure E**.

WARNING: *The extraction tool(s) need to be seated against the module front face before the plunger is pushed in. Otherwise damage to Insert(s) may occur.*

3. Push plunger of extraction tool(s) in to extract Insert(s). The Insert(s) will be ejected out the wiring side of the module shown in **Figure F**.

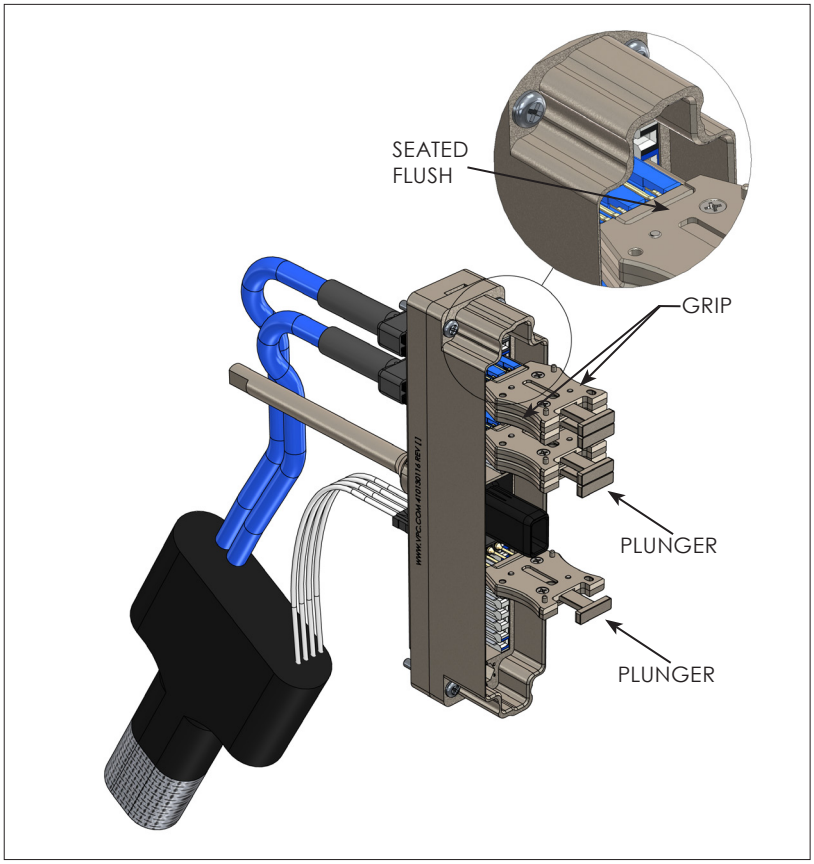

Figure E. Seat removal tool.

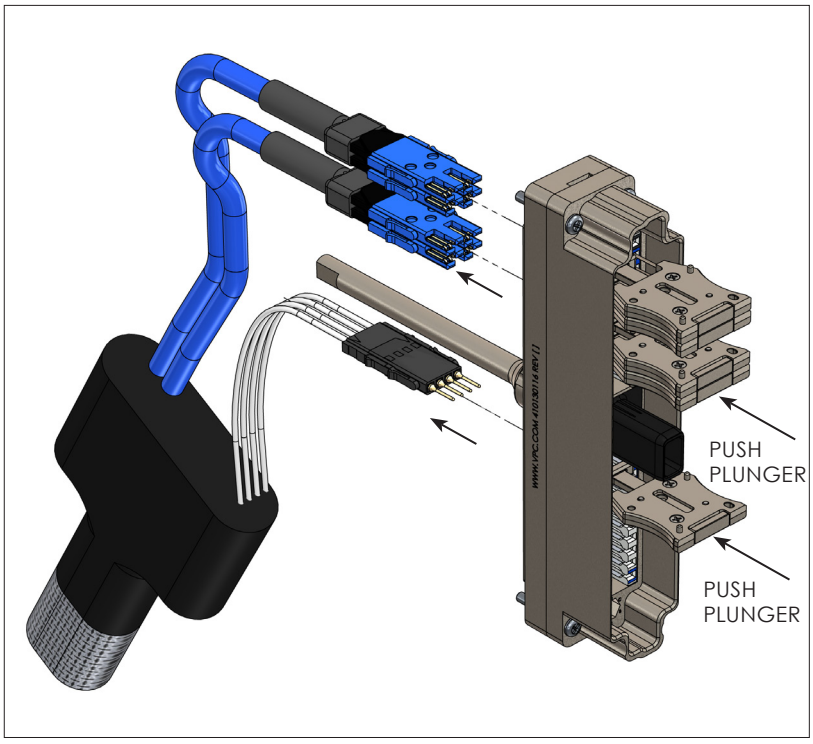

Figure F. Insert removal.

QUADRAPADDLE INSERT CONTACT INSTALLATION/REMOVAL INSTRUCTIONS

TOOLS REQUIRED
Tool, Module Insert, QuadraPaddle, Receiver, Part # 910 112 131
Tool, Extraction, QuadraPaddle, ITA Part # 910 110 111

CONTACT REMOVAL INSTRUCTIONS (RECEIVER)

1. Remove QuadraPaddle Insert from receiver frame (**see Section 2-1 and 2-3**)
2. Align extraction tool protrusions to extraction cavity (**see Figure B and C**).
3. Apply pressure to QuadraPaddle contact tabs (**see Figure A**).
4. Remove patchcord from wiring side (**see Figure C**).

CONTACT REMOVAL INSTRUCTIONS (ITA)

NOTE: ITA QuadraPaddle contacts can be extracted while the QuadraPaddle Insert is in the ITA frame or after the patchcord(s) has been removed.

NOTE: Install/Extract ITA QuadraPaddle contacts per the QuadraPaddle User's Manual. Reference contact Part # 610 138 109 or 610 138 112.

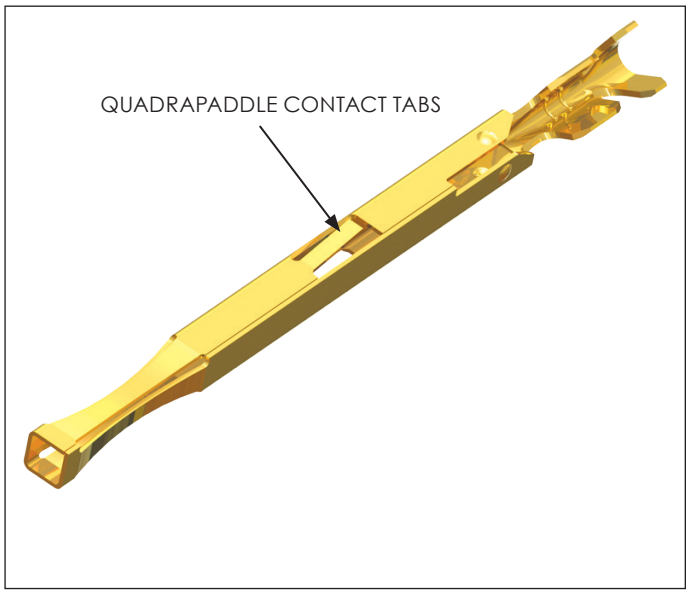

Figure A. QuadraPaddle receiver Insert contact removal.

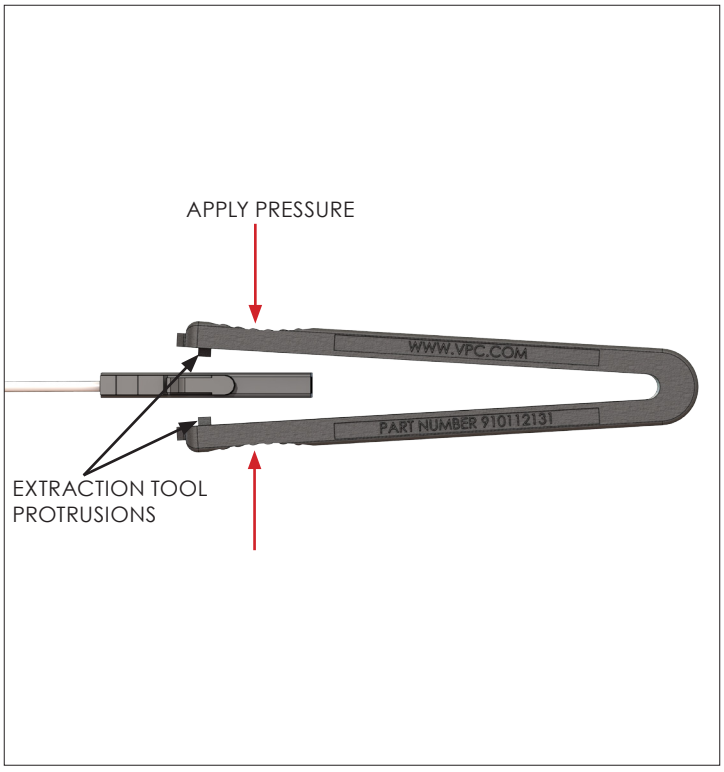

Figure B. QuadraPaddle receiver Insert contact removal tool.

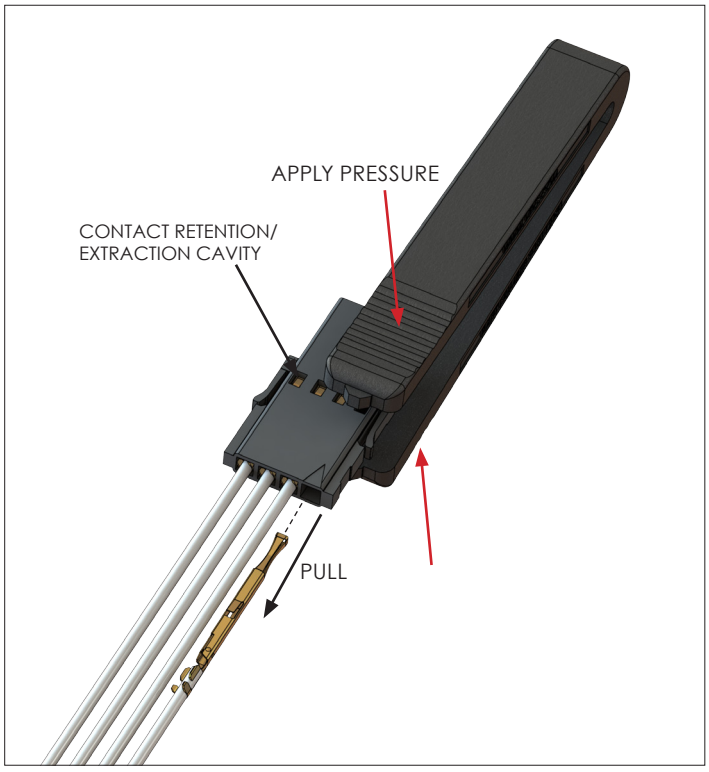

Figure C. QuadraPaddle receiver Insert contact removal tool.

RAIL(S) INSTALLATION/REMOVAL INSTRUCTIONS

PART # 310 130 XXX AND 410 130 XXX

TOOLS REQUIRED

Phillips Head Screwdriver

RAIL(S) REMOVAL INSTRUCTIONS

1. If working with a receiver, use a Phillips head screwdriver to remove strain relief by removing screws (**Figure A**).

   The ITA will require removal of backshell first. See **Section 2** of this User's Manual for instructions.

2. After removing strain relief/backshell, use a Phillips head screwdriver to remove the two Phillips flat head screws that are holding the frame halves together (**Figure A**).

   For ITA use Phillips head screwdriver to loosen the two captive screws on the back of the rear frame (**Figure B**).

3. Pull halves apart.

4. Remove Rail(s).

RAIL(S) INSTALLATION INSTRUCTIONS

1. To install Rail(s), orient rail(s) as shown in (**Figure A**). **Figure C** illustrates the identifiers to aid in orientation (receiver rails shown). The receiver rails are marked with 'RR' (receiver right) and 'RL' (receiver left) when viewing from mating face. The ITA rails are marked with 'IR' (ITA right) and 'IL' (ITA left) when viewing from rear/wiring side.

2. Place rail(s) ledge on flat surface shown in (**Figure D**), then put halves together and tighten the two Phillips flat head screws using a Phillips head screwdriver.

NOTE: Receiver/ITA frame halves are keyed to be placed together only one direction.

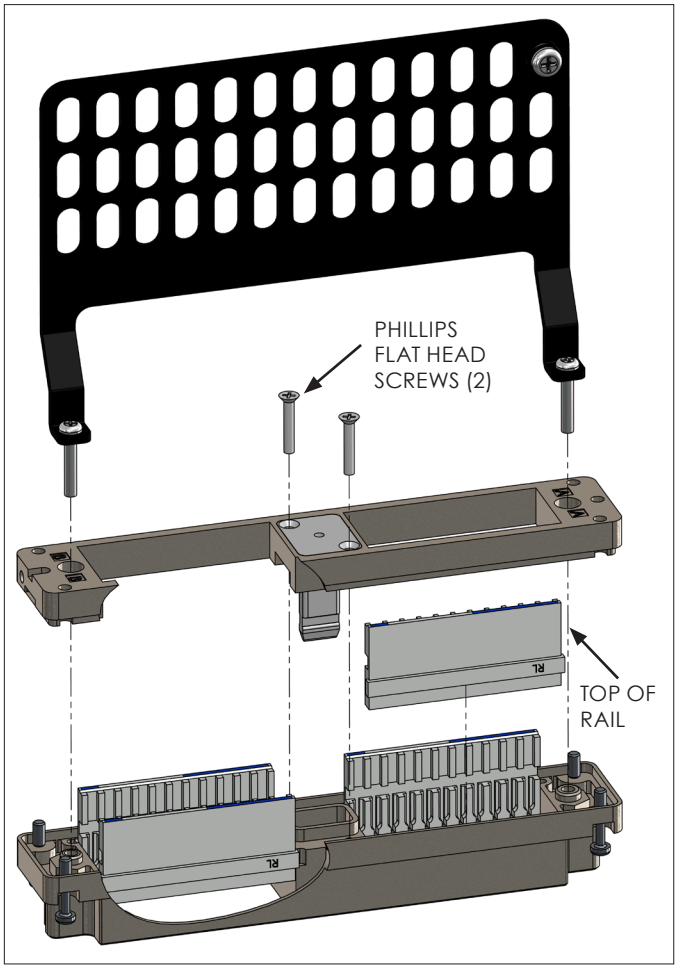

Figure A. Rail(s) install/removal (receiver shown).

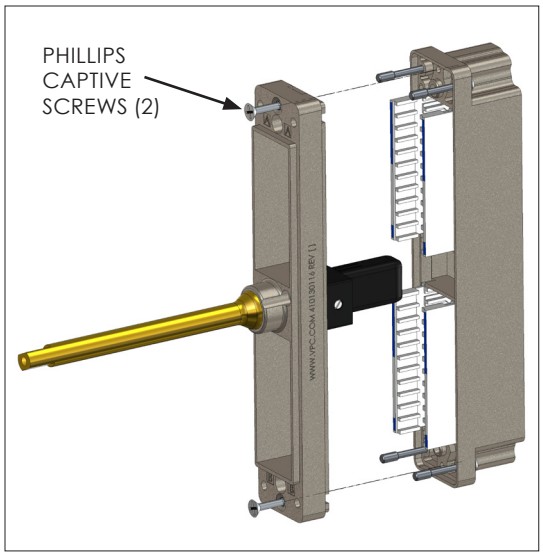

Figure B. ITA frame separation.

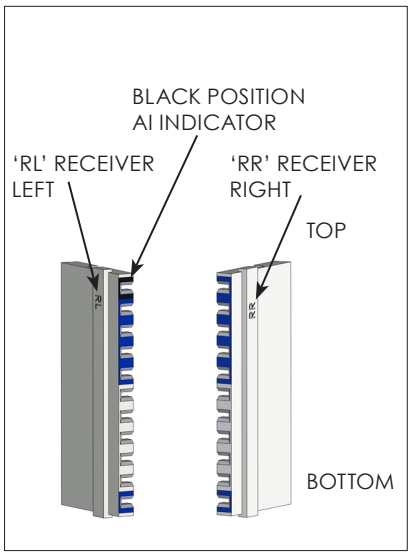

Figure C. Rail(s) - Identifiers.

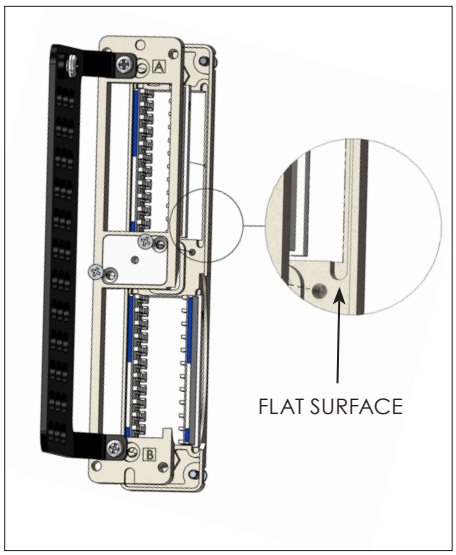

Figure D. Rail(s) install/removal (receiver shown).